

A New Species of *Cayaponia* Manso (Cucurbitaceae: Cucurbitaeae) from Mesoamerica

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ABSTRACT. A new species, *Cayaponia longiloba*, is described from Mesoamerica. It is illustrated, and its affinities are discussed.

While preparing an account of *Cayaponia* for *Flora Mesoamericana* the following new species was identified. It is morphologically most similar to *Cayaponia attenuata* (Hooker & Arnott) Cogniaux, which occurs from Mexico to Mesoamerica. Differences between the species are detailed in the discussion.

Cayaponia is a genus of over 60 species and, as such, is probably the largest genus in the Cucurbitaceae. It is distributed throughout tropical and subtropical America; a single species occurs in the southeastern United States and one species occurs in Africa. The genus was last reviewed by Cogniaux (1881).

Cayaponia longiloba A. K. Monroe, sp. nov.

TYPE: Mexico. Oaxaca: between San Juan Bautista and San Sebastian, 15 m, 31 July 1889, *Rovirosa 548* (holotype, NY). Figure 1.

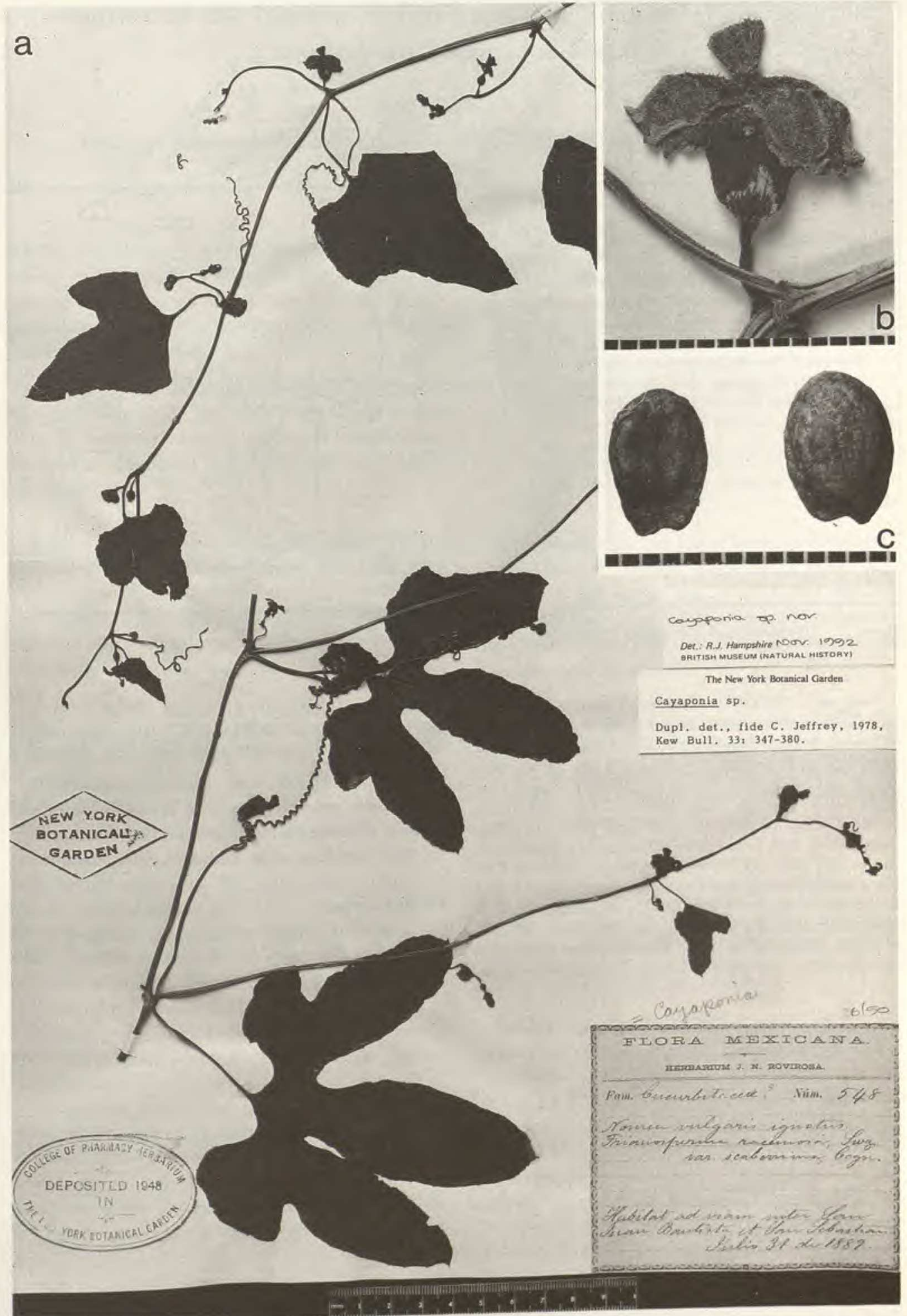
Species *Cayaponiae attenuatae* (Hooker & Arnott) Cogniaux similis, sed seminibus angustimarginatis, petiolo folii tertiam partem laminae longitudinis aequante, floribus fructibusque majoribus, bene differt.

Vine. *Stem* 1.5–4.0 mm diam., glabrous or pilose. *Leaves* 5.5–15.5 × 2.5–15.0 cm, entire to 3–5-lobate, entire leaves ovate, membranous to chartaceous, base obtuse to subtruncate, apex acuminate, occasionally acute; margin denticulate to crenate denticulate; upper surface strigose (the trichomes with very broad multicellular bases) to pustulate, primary and secondary veins hirsute; lower surface hirsute to densely so, primary veins glabrous, secondary veins frequently so; petiole 15–85 × 1.5–3.0 mm, pilose or hirsute, occasionally glabrous. *Tendrils* to ca. 15 cm, simple or bifid, pilose. *Staminate flowers* 1–4, solitary or borne in a fascicle or racemes up to 5 cm long; bracts 2–15 mm long, spiniform to ovate, occasionally forked, pilose; hypanthium 4–6 × 3–4 mm, campanulate, pilose; ca-

lyx lobes 1–2 mm long, glabrous or strigose (the trichomes with very broad multicellular bases), verrucose, spreading; corolla (7–)10–14 × 5 mm; lobes oblong, fused for lower ½ of their length, greenish white, outer surface densely tomentose, inner surface densely short pilose; stamens 10–11 mm long; filaments 7–8 mm × 0.5 mm; anthers ca. 3 × 2 mm; pedicel 3–5 × 0.8–1.2 mm, glabrous to occasionally pilose. *Pistillate flowers* disposed as staminate flowers; hypanthium 2–3 × 3 mm, broadly campanulate, constricted above the ovary to ca. 1 mm diam. for 1–2 mm; calyx lobes ca. 1 mm long; corolla 6–7 × 5–8 mm, spreading; style ca. 6 mm long, filiform; stigmas 2–3 mm long, fused for lower ⅓ of their length, glabrous; ovary ca. 3 × ca. 2.5 mm, subglobose, pilose or glabrous. *Fruiting peduncle* 4–11 × 1 mm, glabrous to sparsely strigose (with very broad multicellular bases). *Fruits* solitary, 12–16 mm, globose, glabrous, greenish yellow to black; apical scar 1–1.4 mm diam., circular, with an occasional central spot; grooved. *Seeds* 3–7 per fruit, 8–9 × 5–6 × 2 mm, ellipsoid, apically compressed, base rounded, apex subtruncate, surface smooth, brown.

Distribution. Moist forest, along riverbanks and in secondary regrowth, from southern Mexico (Oaxaca and Chiapas) to Costa Rica, from 0 to 1000 m (Fig. 2).

Cayaponia longiloba, the name derived from the relatively long corolla, is most closely related to *C. attenuata* (Hooker & Arnott) Cogniaux in terms of the combination of indumentum types, the presence of a bracteate inflorescence, and in having seeds that are apically compressed. It differs, however, in a number of respects. The petioles are generally twice as long in *C. longiloba* as in *C. attenuata*, while there is no corresponding difference in leaf length. The perianth, anthers, and fruit of *C. longiloba* are also significantly larger (twice the size of those of *C. attenuata*). In addition, the seeds of *C. longiloba* are narrowly marginate, while those of *C. attenuata* are emarginate.



Cayaponia sp. nov.

Det.: R.J. Hampshire Nov. 1992
BRITISH MUSEUM (NATURAL HISTORY)

The New York Botanical Garden

Cayaponia sp.

Dupl. det., fide C. Jeffrey, 1978,
Kew Bull. 33: 347-380.

FLORA MEXICANA.

HERBARIUM J. N. ROVIROSA.

Fam. Cucurbitaceae? Num. 548

Nomen vulgare ignotus.
Trianospermum racemosum, Swg.
var. *scaberrimum*, Cogn.

Habitat ad mare inter San
Juan Bautista et San Sebastian
Julio 31 de 1887.

Figure 1. Photograph of the type specimen of *Cayaponia longiloba* A. K. Monro (Rovirosa 548, NY). —a. Habit. —b. Staminate flower. —c. Seed. All scale bars in mm.

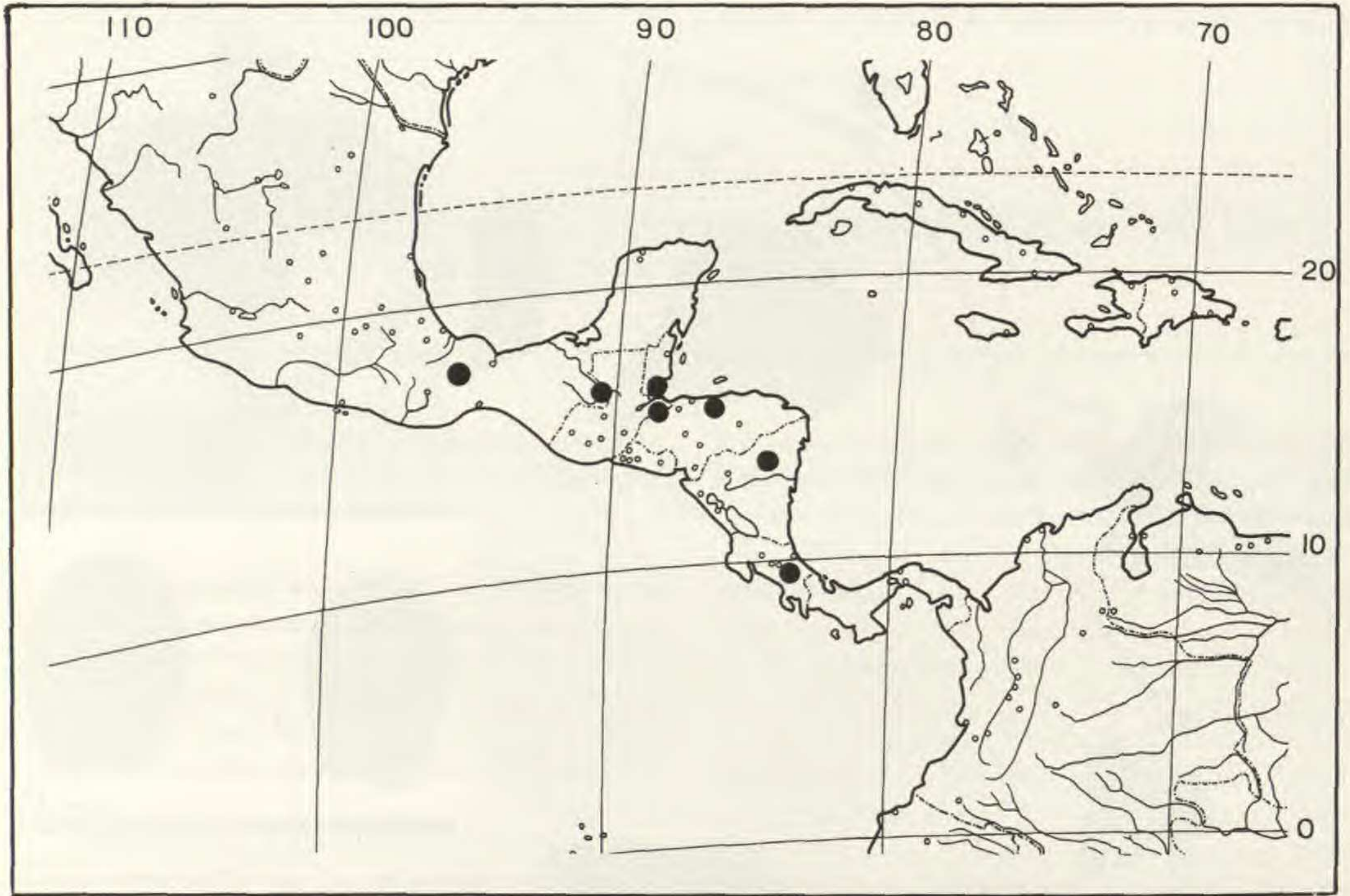


Figure 2. Distribution of *Cayaponia longiloba* A. K. Monro.

Paratypes. MEXICO. **Chiapas:** Esperanza, Escuintla, 150 m, 7 Dec. 1949, *Matuda 18710* (F, K). GUATEMALA. **Izabal:** Río Juyamá, SE of Cheyenne, about 15 mi. SW of Bananera, 50–100 m, 8 Apr. 1940, *Steyermark 39170* (F, NY). BELIZE. Jacinto Creek, 15 m, 20 July 1933, *Schipp 1195* (BM, F, NY); Stann Creek Railway, 15 m, 26 Sep. 1929, *Schipp 393* (BM, F, NY); Stann Creek, Silk Grass Creek Reserve, 13 Nov. 1939, *Gentle 3091* (NY). HONDURAS. **Cortés:** Aldea de Corinto y alrededores frontera con Guatemala, 55 km al O de Puerto Cortés, 9–11 Aug. 1975, *Nelson et al. 2855* (MO). **Atlántida:** Lancetilla Valley, near Tela, 20–600 m, 6 Dec. 1927 to 20 Mar. 1928, *Standley 52833* (F). NICARAGUA. **Zelaya:** Guamil o breñas sobre áreas

pantanosas a lo largo del Río Grande, 0–15 m, 21 Apr. 1949, *Molina 2290*. COSTA RICA. **Cartago:** railway track below Turrialba, 1000 m, 6 Sep. 1928, *Stork 2487* (F).

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Literature Cited

Cogniaux, C. A. 1881. Curcubitaceae. In: A. & C. de Candolle, *Monographiae Phanerogamarum* 3: 325–1008.